

## Upper Yellowstone Valley (178,039 acres)



Figure 12. Upper Yellowstone Valley Focus Area

The Upper Yellowstone Valley area, south of Livingston, is better known to many as Paradise Valley. Bracketed by the Absaroka-Beartooth Wilderness on the east and the Gallatin Range on the west, the valley's grassland habitats are bisected by the Yellowstone River and its riparian areas and cottonwood stands. Several streams in the area harbor genetically pure populations of Yellowstone cutthroat trout. Much of the valley lies in the rain shadow of the mountains and is a wintering area for elk, bighorn sheep, and mule deer. The area supports grizzly bears, and there is an increasing wolf presence. Cradled within the Gallatin and Absaroka ranges are low-elevation meadows and limited juniper stands mixed with grasslands and sagebrush. Higher up are forests of aspen, pine, spruce, subalpine fir, and whitebark pine.

### Landscape Characteristics

This valley consists of valley floor, terraces, toeslopes, and foothills that formed in alluvium and Tertiary sedimentary and volcanic rocks. Elevations range from 4,500 to 7,500 feet. Drainage density is moderate and wetlands are fairly common. Mean annual precipitation ranges from 15 to 40 inches, with about 55 percent falling as snow. The soil temperature and moisture regimes are frigid and aridic ustic. The primary natural disturbance is flooding. Another important natural biotic disturbance is beaver activity in riparian areas. Land use is predominantly recreational development, with some agriculture and livestock grazing. The breakdown for land stewardship in the Upper Yellowstone Valley area is as follows:

U.S. Federal Agencies:	18,656 acres, or 10.5% of total area, which include:
BLM:	1,668 acres, or 0.9% of total area

USFS: 16,988 acres, or 9.6% of total area  
 State Agencies: 12,293 acres, or 7% of total area  
 Private: 146,101 acres, or 82.1% of total area

### Associated Habitats

Habitat	Habitat Tier	Percentage of Area
Mixed Broadleaf Forest	I	2.14
Mixed Xeric Forest	II	2.28
Moderate/High Cover Grasslands	I	2.28
Mixed Subalpine Forest	III	3.95
Agricultural Lands - Dry	III	3.98
Wetland and Riparian	I	4.57
Montane Parkland and Subalpine Meadows	III	5.00
Douglas Fir	II	5.17
Sagebrush	I	5.49
Agricultural Lands - Irrigated	III	7.15
Rock	III	7.87
Very Low Cover Grasslands	I	11.16
Low/Moderate Cover Grasslands	I	28.56

Note: A total of 89.61% of the Upper Yellowstone Valley area is represented; 10.39% is made up of a combination of other habitat types.

### Associated Species of Greatest Conservation Need (Tier I Species)

There are a total of 264 terrestrial vertebrate species that are found within the Upper Yellowstone Valley Focus Area. Tier I species are listed below. All associations can be found in Table 18.

**Amphibians:** Western Toad and Northern Leopard Frog

**Birds:** Trumpeter Swan, Bald Eagle, Long-billed Curlew, and Black-backed Woodpecker

**Mammals:** Gray Wolf, Grizzly Bear, and Canada Lynx

### Conservation Concerns & Strategies

Conservation Concerns	Conservation Strategies
Recreational infrastructure development, especially road network development	Work with Montana Department of Transportation and Federal Highway Commission to effectively mitigate impacts of highway construction

Habitat loss and fragmentation, especially as a result of human population growth/development	Support strategic conservation easements/protection by conservation organizations or public agencies
	Support state/federal tax incentives that discourage habitat fragmentation
	Promote and further develop county ordinances that help plan for and manage development
	Support state/federal tax incentives that discourage habitat fragmentation
Invasive or exotic plant species	Support efforts to eradicate exotic or invasive plant species
Range or forest management practices	Support government and private conservation activities that encourage and support sustainable land management practices (example; rest and rotation schedules)
Streamside residential development	Develop statewide riparian best management principles

## References

A Biological Conservation Assessment for the Utah-Wyoming Rocky Mountain Ecoregion: Report to The Nature Conservancy. 2001. R. Noss, G. Wuerthner, K. Vance-Borland, and C. Carroll. Conservation Science, Inc. 125 pp + Executive Summary and Appendix D.